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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/891,750	06/26/2001	Kevin Joseph Moriarty	QA0239ACIP	2728

7590 12/03/2002

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EXAMINER

BALASUBRAMANIAN, VENKATARAMAN

ART UNIT	PAPER NUMBER
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1624

DATE MAILED: 12/03/2002

11

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/891,750

Applicant(s)

MORIARTY ET AL.

Examiner

Venkataraman Balasubramanian

Art Unit

1624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 September 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 52-95 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 10.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

Applicants' response, which included cancellation all pending claims 1-51 and addition of new claims 52-95, filed on 9/19/2002, is made of record.

Claims 52-95 are now pending.

In view of applicants abandoning the copending application 09/747,195, the obviousness-type double patenting rejection made in the previous office action has been rendered moot.

In view of applicants' response, the following apply.

#### ***Claim Objections***

The amendment filed 9/19/2002 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: Applicants have amended the structure of compounds shown on page 104 and 105 for which there is no explanation and it appears to be introduction of new matter

Applicant is required to cancel the new matter in the reply to this Office Action.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 52-95 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which

Art Unit: 1624

applicant regards as the invention. Following reasons apply. Any claim not specifically rejected is rejected as being dependent on a rejected claim.

1. Recitation of the term "prodrug" is deemed as indefinite. Prodrugs in general and as noted in specification, are compounds, which undergo in vivo hydrolysis to parent active drugs. In that sense recitation of "prodrug" is acceptable. However, the definition of various R groups include such groups, namely esters, alkoxycabonyl etc. and therefore it is not clear what is the difference between these variable groups and the prodrug groups. The term "prodrug" creates ambiguity as to when to treat a compound as prodrug or parent compound.

Note this rejection is same as made in the previous office action except that the newly added claims are rejected herein. Applicants have not addressed the issue raised by the examiner but have stated what is a prodrug. The rejection is proper and is maintained.

2. In claim 53, the proviso "neither  $R^2$  nor  $R^{14}$ " renders the claim indefinite, as it is not clear whether the conditional proviso in claim 1 or the above proviso is to be applied to claim 53. Note claim 53 is dependent on claim 52.
3. Claims 54-56 are indefinite as they recite  $R^2$  choice without reciting Z as  $NR^1R^2$ .

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 52-95 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

1. Applicants have replaced the term "isomers" with "stereoisomers" for which there is no support in the specification and hence the said term is deemed as new mater.

Claims 82-85 and 87-95 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for rheumatoid arthritis, does not reasonably provide enablement for treating any or all p38 mediated diseases/ disorders and or TNF- $\alpha$  mediated disorders including those yet to be discovered as due to p38 or TNF- $\alpha$ . The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to use the invention commensurate in scope with these claims. Following reasons apply.

The instant claims 19-30 are drawn to "treating a condition associated with p38 activity ". and the instant claims 87-95 are drawn to "treating TNF- $\alpha$  mediated disorder ". The scope of these claims includes not only any or all conditions but also those condition yet to be discovered for which there is no enabling disclosure. In addition, the scope of these claims includes treatment of various diseases, which is not adequately enabled solely based on the inhibiting expression of p38 activity and or TNF- $\alpha$  activity of the compounds provided in the specification at pages 19-20. The instant compounds are disclosed to inhibit expression of p38 activity and or TNF- $\alpha$  activity and it is recited

Art Unit: 1624

that the instant compounds are therefore useful in treating any or all diseases where p38 activity and or TNF- $\alpha$  activity is implicated, for which applicants provide no competent evidence. Furthermore, the applicants have not provided any competent evidence that the instantly disclosed tests are highly predictive for all the uses disclosed and embraced by the claim language for the intended host. Moreover many if not most of diseases such as Alzheimer's disease, multiple sclerosis, psoriasis etc. are very difficult to treat and at present there is no known drug, which can successfully reverse the course of these diseases, despite the fact that there are many drugs, which can be used for "inflammatory condition". Note substantiation of utility and its scope is required when utility is "speculative", "sufficiently unusual" or not provided. See *Ex parte Jovanovics*, 211 USPQ 907, 909; *In re Langer* 183 USPQ 288. Also note *Hoffman v. Klaus* 9 USPQ 2d 1657 and *Ex parte Powers* 220 USPQ 925 regarding type of testing needed to support in vivo uses. Next, applicant's attention is drawn to the Revised Interim Utility and Written Description Guidelines, at 64 FR 71427 and 71440 (December 21, 1999) wherein it is emphasized that 'a claimed invention must have a specific and substantial utility'. The disclosure in the instant case is not sufficient to enable the instantly claimed method treating solely based on the inhibitory activity disclosed for the compounds. The state of the art is indicative of the requirement for undue experimentation.

In evaluating the enablement question, several factors are to be considered. Note *In re Wands*, 8 USPQ2d 1400 and *Ex parte Forman*, 230 USPQ 546. The factors include: 1) The nature of the invention, 2) the state of the prior art, 3) the predictability or

Art Unit: 1624

lack thereof in the art, 4) the amount of direction or guidance present, 5) the presence or absence of working examples, 6) the breadth of the claims, and 7) the quantity of experimentation needed.

1) The nature of the invention: Therapeutic use of the compounds in treating diseases that require inhibiting expression of p38 activity and or TNF- $\alpha$  activity.

2) The state of the prior art: A very recent publication expressed that treating disease by the inhibition of expression of p38 activity and or TNF- $\alpha$  is still exploratory. See Henry et al. provided in the Information Disclosure Statement as well as Graninger et al. Curr. Opin. Rheumatol. 13(3): 209-13, 2001. (PubMed Abstract provided)

3) The predictability or lack thereof in the art: Applicants have not provided any competent evidence or disclosed tests that are highly predictive for the pharmaceutical use for treating any or all condition of the instant compounds. Pharmacological activity in general is a very unpredictable area. Note that in cases involving physiological activity such as the instant case, "the scope of enablement obviously varies inversely with the degree of unpredictability of the factors involved". See *In re Fisher*, 427 F.2d 833, 839, 166 USPQ 18, 24 (CCPA 1970).

4) The amount of direction or guidance present and 5) the presence or absence of working examples: Specification has no working examples to show treating any or all condition and the state of the art is that the effects of inhibiting expression of TNF- $\alpha$  activity are unpredictable and at best limited to modulation of rheumatoid arthritis.

6) The breadth of the claims: The instant claims embrace any or all condition including those yet to be related to expression of p38 activity and or TNF- $\alpha$  activity.

Art Unit: 1624

7) The quantity of experimentation needed would be an undue burden to one skilled in the pharmaceutical arts since there is inadequate guidance given to the skilled artisan, regarding the pharmaceutical use, for the reasons stated above.

Thus, factors such as "sufficient working examples", "the level of skill in the art" and "predictability", etc. have been demonstrated to be sufficiently lacking in the instant case for the instant method claims. In view of the breadth of the claims, the chemical nature of the invention, the unpredictability of receptor-ligand interactions in general, and the lack of working examples regarding the activity of the claimed compounds towards treating the variety of diseases of the instant claims, one having ordinary skill in the art would have to undergo an undue amount of experimentation to use the instantly claimed invention commensurate in scope with the claims.

This rejection is similar to that made in the previous office action except that claims rejected herein are those newly added in paper # 9.

Applicants' argument to overcome this rejection is fully considered but is not persuasive.

1. First of all applicants are not fully correct in stating examiner had not provided a reference to support the above 112 first paragraph rejection. Applicants should recheck the previous office action, page 5, under 1) the nature of the invention. Examiner had clearly indicated Henry et al. as a reference, which was of course provided by the applicants. Therefore, contrary to applicants urging, prima facie burden had been met with.



2. Applicants reliance on *In re Brana* is not proper. *Brana* is not to the point for the instant case. Applicants should note that the issue addressed in *Brana* is treating cancer in general is to be deemed as enablement of all cancers. Since cancer per se is a proliferative disease, all cancers are deemed as variant of cancer, a single disease, in general. Such is not the case for the instant application. The diseases embraced as noted in specification on page 36 include inflammatory diseases, autoimmune disease, destructive bone diseases, proliferative diseases, infectious diseases, degenerative diseases angiogenic diseases, viral diseases etc are totally diverse. There is no evidence in the prior art that all these diseases are equivalent.
3. As applicants' citation of *PPG Indus*, one trained in the art would definitely consider that enabling all the diverse diseases to undue experimentation. Applicants have not provided any evidence why it is not an undue experimentation.
4. As for *New et al.* contrary to applicants urging does not provide support for all or any disease including those yet to be discovered as due to p38 activity and or TNF- $\alpha$  activity and one trained in the art would know that the *New et al* suggesting additional use for such inhibitors for some specific disease recited therein. *New et al* does not provide support for all diseases embraced in the instant claims. The same is true for *Boehm et al.*
5. As for *Dumas et al.* again which is related to specific disease, does not lend support to all or any disease generically embraced in the claim language.

Hence this rejection is proper and is maintained.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 14 and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by Schmitz et al. US 3,290,305.

Schmitz et al. teaches several trisubstituted triazines, which include compounds, claimed generically in the instant claims, for use as disinfectants.

See formula I on col. 2 and note the definition of X, Y and Z. See the first compound on col. 3.

Claims 1, 2, 14 and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by Winter et al. US 3,867,383.

Winter et al. teaches several trisubstituted triazines, which include compounds, claimed generically in the instant claims, for use as cardiovascular agents.

See formula I on col.1 and note the definition of Z and R". See examples 2, 3, 4, 5 and 6 for compounds made.

Claims 1, 2, 14 and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by Hoppe et al. US 4,617,390

Hoppe et al. teaches several trisubstituted triazines, which include compounds, claimed generically in the instant claims, for use as sunscreen agents.

See formula I on claim 1 and note the definition of R. See examples 1-8 for compounds made.

Claims 1, 2, 14 and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by Newton et al. US 5,062,882.

Newton et al. teaches several trisubstituted triazines, which include compounds, claimed generically in the instant claims, for use as herbicides.

See formula I on col. 1 and note the definition of Z, Y, R<sup>1</sup> and R<sup>2</sup>. See examples 1-67 and Table I for compounds made.

Claims 1, 2, 14 and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by Raspanti et al. US 5,346,791.

Raspanti et al. teaches several trisubstituted triazines, which include compounds, claimed generically in the instant claims, for use as light stabilizers

See formula I on col. 1 and note the definition of X, R, R<sub>1</sub> and R<sub>2</sub>. See examples 1-40 and Table I for compounds made.

Claims 1, 2, 14 and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by Raspanti et al. US 5,759,525.

Raspanti et al. teaches use trisubstituted triazine, which includes compound, claimed generically in the instant claims, for use as light stabilizers

See compound of formula I on col. 1.

Claims 1, 2, 14 and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by Raspanti et al. US 5,801,244.

Raspanti et al. teaches several trisubstituted triazines, which include compounds, claimed generically in the instant claims, for use as light stabilizers

See formula I on col. 1 and note the definition of various R groups. See examples 1-5 for compounds made.

**All the above 102 rejections are obviated in view of applicants' are rendered moot in view of applicants cancellation of claims 1-51 and are also obviated due to exclusion of "isomers" from the newly added claims.**

However, the following new rejections apply.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 52-53, 61, 69-70 and 78 are rejected under 35 U.S.C. 102(b) as being anticipated by Heimberger US 3,625,979.

Heimberger teaches several trisubstituted triazines, which include compounds, claimed generically in the instant claims, for use as anti-inflammatory agents

See formula I and note the definition of R<sup>1</sup>, R<sup>2</sup>, and R<sup>3</sup> definition shown on col. 1. Note piperazine and homopiperazine with alkyl group is included. See examples 1-13 for compounds made particularly examples 6,10, 12, and12.

Claims 52-53 and 61 are rejected under 35 U.S.C. 102(b) as being anticipated by Cyba et al. US 3,590,042.

See col. 4 for various compounds especially line 34 and 54.

Claims 52-57, 61, 69 and 78-79 are rejected under 35 U.S.C. 102(e) as being anticipated by Henkin et al. US 6,288,228.

Henkin et al. teaches several trisubstituted triazines, which include compounds, claimed generically in the instant claims, for use as angiogenesis inhibitors.

See formula I and note the definition of A R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup> definition shown on col. 2. See line 17 of column 3 for a compound, which meets instant compound requirement. See example 4 on column 18.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 51-65 and 67-75, 79-80 and 86 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daeyaert et al US 6,150,360.

Daeyaert et al. teaches several trisubstituted triazines, which include compounds, claimed herein for use as anti-HIV agents. See col. 1, formula I and note the definition of L, R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup> and n. See col. 3-10 for various preferred embodiments and col. 10-14 for processes of making them. See col. 17-27 for examples and Table 2 for compounds made.

Claims rejected herein require a carboxy or carboxamide or nitro group in the aryl ring in addition to other substituents in the triazine ring while Daeyaert et al. teaches a cyano group.

However Daeyaert et al et al. teaches the equivalency of exemplified cyano group in the benzene ring and other substituents in the triazine ring shown in examples 1-82 shown in Table 2 with those contemplated and claimed in the definition of various variable groups and R<sup>4</sup> groups of formula I. See col. 1, formula I and note the definition of L, R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup> and n. Note R<sup>4</sup> includes carboxy or carboxamide or nitro groups. Thus it would have been obvious to one having ordinary skill in the art at the time of the invention was made to make compounds with triazine core variously substituted in said ring as permitted by the reference and expect resulting compounds (instant compounds) to possess the uses taught by the art in view of the equivalency teaching outline above.

This rejection is similar to that made in the previous office action.

Applicants' argument to overcome this rejection is not persuasive.

Applicants urge that compounds exemplified by Daeyaert et al are diarylamino compounds hence they do not render the instant claims 55, 62-65, 70 and 77 obvious variant. This is not totally correct. Claim 77 is distinct and is not rejected herein. However, the rest of the claims are obvious variant of compounds taught by the reference. As noted above, Daeyaert et al teaches equivalency of those compounds exemplified therein with those generically claimed. Given the fact that on column 4 through column 10, Daeyaert et al. teaches several possible reactants and preferred embodiments, there is adequate experimental guidance to make the compounds embraced in the genus taught by Daeyaert et al as seen in the schemes shown on column 10 through column 14 provides the process of making and there is no reasons to believe that compounds other than those taught would not also have the same utility. Hence given this guidance, one would be motivated to make compounds taught by the genus including those wherein there is only one arylamino group in the triazine. In re Baird and Jones is not to the point. It is also should be noted that the instant genus is as large as the reference genus. In this regard, applicants should note, "References must be considered under 35 U.S.C 103, not only for what it expressly teaches but also for what it fairly suggests; all disclosures of prior art, including unpreferred embodiments must be considered in determining obviousness". In re Bruckel, 201 USPQ 67.

Hence this rejection is proper and is maintained.

Claims 52-53, 61, 69-70, and 78 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heimberger US 3,625,979.

Teachings of Heimberger as discussed in the above 102 rejection is incorporated herein.

Claims rejected herein require a Z and or R<sup>11</sup> to be heterocyclic ring especially homopiperazine.

However Heimberger teaches the equivalency of exemplified piperazine /morpholine group shown in examples 1-13 with those contemplated and claimed in the definition of various variable groups on column 1. Thus it would have been obvious to one having ordinary skill in the art at the time of the invention was made to make compounds with triazine core variously substituted in said ring as permitted by the reference and expect resulting compounds (instant compounds) to possess the uses taught by the art in view of the equivalency teaching outline above.

Claims 52-57, 61, 69 and 78-79 are rejected under 35 U.S.C. Henkin et al. US 6,288,228.

Teachings of Henkin et al. as discussed in the above 102 rejection is incorporated herein. As noted above, Henkin et al. teaches several trisubstituted triazines, which include compounds, claimed generically in the instant claims, for use as angiogenesis inhibitors.

Instant claims require various heterocycle as R<sup>9</sup> substituent whereas Henkin teaches pyrrolyl group. However Henkin et al. teaches the equivalency of exemplified pyrrolyl group shown in example 4 with those contemplated and claimed in the definition



Art Unit: 1624

of various variable groups on column 2. Thus it would have been obvious to one having ordinary skill in the art at the time of the invention was made to make compounds with triazine core variously substituted in said ring as permitted by the reference and expect resulting compounds (instant compounds) to possess the uses taught by the art in view of the equivalency teaching outline above.

Claims 1,14 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmitz et al. US 3,290,305.

Schmitz et al. teaches several trisubstituted triazines, which include compounds, claimed generically in the instant claims, for use as disinfectants.

See formula I on col. 2 and note the definition of X, Y and Z. See the first compound on col. 3.

Claims 1, 2, 14 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Winter et al. US 3,867,383.

Winter et al. teaches several trisubstituted triazines, which include compounds, claimed generically in the instant claims, for use as cardiovascular agents.

See formula I on col.1 and note the definition of Z and R". See examples 2, 3, 4,5 and 6 for compounds made.

Claims 1, 2, 14 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoppe et al. US 4,617,390

Hoppe et al. teaches several trisubstituted triazines, which include compounds, claimed generically in the instant claims, for use as sunscreen agents.

See formula I on claim 1 and note the definition of R. See examples 1-8 for compounds made.

Claims 1, 2, 14 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Newton et al. US 5,062,882.

Newton et al. teaches several trisubstituted triazines, which include compounds, claimed generically in the instant claims, for use as herbicides.

See formula I on col. 1 and note the definition of Z, Y, R<sup>1</sup> and R<sup>2</sup>. See examples 1-67 and Table I for compounds made.

Claims 1, 2, 14 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Raspanti et al. US 5,346,791.

Raspanti et al. teaches several trisubstituted triazines, which include compounds, claimed generically in the instant claims, for use as light stabilizers

See formula I on col. 1 and note the definition of X, R, R<sub>1</sub> and R<sub>2</sub>. See examples 1-40 and Table I for compounds made.

Claims 1, 2, 14 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Raspanti et al. US 5,759,525.

Raspanti et al. teaches use trisubstituted triazine, which includes compound, claimed generically in the instant claims, for use as light stabilizers

See compound of formula I on col. 1.

Claims 1, 2, 14 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Raspanti et al. US 5,801,244.

Raspanti et al. teaches several trisubstituted triazines, which include compounds, claimed generically in the instant claims, for use as light stabilizers

See formula I on col. 1 and note the definition of various R groups. See examples 1-5 for compounds made.

While said compound of the above references doesn't anticipate the scope of instant claims they are very closely related, being positional isomers of compounds i.e. 3-substituent in the phenyl ring vs 4-substituent in the phenyl ring . However, positional isomers are not deemed patentably distinct absent evidence of superior or unexpected properties. See *In re Crounse*, 150 USPQ 554; *In re Norris* 84 USPQ 458; *In re Finely* 81 USPQ 383 and 387; *Ex parte Engelhardt*, 208 USPQ 343; *Ex parte Henkel*, 130 USPQ 474, regarding positional isomers

References cited in Supplemental Information Disclosure Statement (paper # 10) are made of record except for those which were duplicate of the references already cited in the PTO 892.

### ***Conclusion***

Any inquiry concerning this communication from the examiner should be addressed to Venkataraman Balasubramanian (Bala) whose telephone number is (703) 305-1674. The examiner can normally be reached on Monday through Thursday from 8.00 AM to 6.00 PM. The Supervisory Patent Examiner (SPE) of the art unit 1624 is Mukund Shah whose telephone number is (703) 308-4716.

The fax phone number for the organization where this application or proceeding is assigned (703) 308-4556.

Application/Control Number: 09/891,750  
Art Unit: 1624

Page 19

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1235.

*V. Balasubramanian*  
Venkataraman Balasubramanian

11/30/2002